## Yian Su, Ph.D. Candidate

yiansu2018@u.northwestern.edu

yiansu.com

in linkedin.com/in/yian-su

@yiansu



### **Education**

Sep. 2021 – present Ph.D., Northwestern University, Computer Science.

Advisor: Simone Campanoni

Research Interest: Parallelizing & Optimizing Compilers, Runtime Scheduling

Techniques, Heterogeneous Systems.

Sep. 2018 – Jun. 2020 **Master's, Northwestern University**, Computer Science.

Advisor: Simone Campanoni

Thesis: A Better Memory Understanding for Program Dependence Graph through

Static-Value Flow Analysis.

Sep. 2017 – Jun. 2018 University of Illinois at Chicago, Electrical and Computer Engineering.

Senior-year Exchange Program. Advisor: Vladimir Goncharoff

Project: Intelligent Shopping Cart.

Sep. 2014 – Jun. 2017 **Bachelor's, Northeastern University (China)**, Computer Science.

#### **Publications**

### **Conference Proceedings**

- Y. Su, M. Rainey, N. Wanninger, et al., "Compiling loop-based nested parallelism for irregular workloads," in Proceedings of the 29th ACM International Conference on Architectural Support for Programming Languages and Operating Systems., ser. ASPLOS '24, 2024.
- A. Matni, E. A. Deiana, **Y. Su**, et al., "Noelle offers empowering llvm extensions," in *Proceedings of the 20th IEEE/ACM International Symposium on Code Generation and Optimization*, ser. CGO '22, Virtual Event, Republic of Korea: IEEE Press, 2022, pp. 179–192, ISBN: 9781665405843. ODI: 10.1109/CG053902.2022.9741276.
- C. Wang, **Y. Su**, L. Zhou, S. Peng, Y. Yuan, and H. Huang, "A virtual network embedding algorithm based on hybrid particle swarm optimization," in *Smart Computing and Communication*, Cham: Springer International Publishing, 2017, pp. 568–576, ISBN: 978-3-319-52015-5.

#### arXiv

Z. Xu, Y. Chon, **Y. Su**, et al., Prompt: A fast and extensible memory profiling framework, 2023. arXiv: 2311.03263 [cs.PF].

# **Teaching Experience**

Sep. 2019 – Dec. 2019

**Teaching Assistant,** Northwestern University.

Introduction to Database Systems and Data Warehouse.

## **Work Experience**

Jun. 2020 - Sep. 2021

Software Development Engineer, Amazon.com.

Collaborated with experienced cross-disciplinary Amazonians to conceive, design, and bring innovative products and services to market in an agile environment for delivering high-quality software

Jun. 2019 - Sep. 2019

**Software Development Engineer Intern,** Amazon.com.

Designed, implemented an automated data pipeline to generate a new feature in Amazon's search process in order to decrease search defects rate

### Skills

**Programming Languages** 

C, C++, Java, Python, Lisp, Perl, SQL, JavaScript, Markdown, LEX.

Softwares

LLVM, Git, Visual Studio, Jupyter Notebook.

### **Miscellaneous**

#### **Awards**

May 2018 Winner, Computer Engineering Category at UIC EXPO 2018.

Nov. 2017 National Scholarship, Northeastern University.

Nov. 2016 National Scholarship, Northeastern University.

### Leadership

Sep. 2018 Vice President of Membership. Northwestern Toastmasters Club.

Apr. 2016 Vice President. International Communication Club @ Northeastern University.